

# Notice of Allowability

Application No.

10/659,631

Examiner

Alton N. Pryor

Applicant(s)

DAY, DONAL F.

Art Unit

1616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 8/12/04.
2. ☒ The allowed claim(s) is/are 1-36.
3. ☒ The drawings filed on 10 September 2003 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

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## Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date 3/22/04
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

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An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Attorney Patty on 10/29/04.

The application has been amended as follows:

Claims 1-36 below replaces all versions of the claims in the record.

Charge any fees to Deposit Account No. 502768 (access code is 5883).

1. (currently amended) A biocide composition formed from ingredients comprising a peroxide and a hypochlorite, wherein the biocide composition is formed by adding the peroxide ingredient to the hypochlorite ingredient so that the weight ratio of the hypochlorite to the peroxide is in the range of about 10:1 to 100:1 ~~no less than about 10:1~~.
2. (original) A biocide composition as in Claim 1, wherein the peroxide is an alkali metal peroxide.
3. (original) A biocide composition as in Claim 2, wherein the peroxide is sodium peroxide.
4. (original) A biocide composition as in Claim 1, wherein the peroxide is hydrogen peroxide.
5. (original) A biocide composition as in Claim 1, wherein the hypochlorite is an alkali metal hypochlorite.
6. (original) A biocide composition as in Claim 5, wherein the hypochlorite is sodium hypochlorite.
7. (original) A biocide composition as in Claim 1, wherein the peroxide is hydrogen peroxide and the hypochlorite is sodium hypochlorite.
8. (original) A biocide composition as in Claim 7, wherein the weight ratio of the sodium hypochlorite to the hydrogen peroxide is about 10:1.
9. (currently amended) A method of producing a biocide composition, the method comprising charging to a vessel a quantity of a hypochlorite, and then adding to the hypochlorite so charged a quantity of a peroxide, the weight ratio of the hypochlorite so charged to the peroxide added thereto being in the range of about 10:1 to 100:1 ~~no less than about 10:1~~.

- I0.(original) A method according to Claim 9, wherein the method is carried out in essentially the absence of organic matter.
- II. (original) A method according to Claim 9, wherein the peroxide is an alkali metal peroxide.
- I2. (original) A method according to Claim II, wherein the peroxide is sodium peroxide.
- I3. (original) A method according to Claim 9, wherein the peroxide is hydrogen peroxide.
- I4. (original) A method according to Claim 9, wherein the hypochlorite is an alkali metal hypochlorite.
- I5. (original) A method according to Claim I4, wherein the hypochlorite is sodium hypochlorite.
- I6. (original) A method according to Claim 9, wherein the hypochlorite is sodium hypochlorite and the peroxide is hydrogen peroxide.
- I7. (original) A method according to Claim I6, wherein the weight ratio of the hypochlorite so charged to the peroxide added thereto is about 10:1.
- I8.(original) A method according to Claim I7, wherein the method is carried out in essentially the absence of organic matter.
- I9. (original) A method which comprises contacting a microorganism with a biocidally effective amount of a composition according to any of Claims I-8.
20. (new) A method according to Claim 9, wherein the weight ratio of the hypochlorite so charged to the peroxide added thereto is in the range of about 10:1 to 50:1.
21. (new) A method according to Claim 20, wherein the weight ratio of the hypochlorite so charged to the peroxide added thereto is about 10:1.
22. (new) A method according to Claim 20, wherein the method is carried out in essentially the absence of organic matter.
23. (new) A method according to Claim 20, wherein the peroxide is an alkali metal peroxide.
24. (new) A method according to Claim 23, wherein the peroxide is sodium peroxide.
25. (new) A method according to Claim 20, wherein the peroxide is hydrogen peroxide.
26. (new) A method according to Claim 20, wherein the hypochlorite is an alkali metal hypochlorite.
27. (new) A method according to Claim 26, wherein the hypochlorite is sodium hypochlorite.

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28. (new) A method according to Claim 20, wherein the hypochlorite is sodium hypochlorite and the peroxide is hydrogen peroxide.
29. (new) A biocide composition as in Claim I, wherein the weight ratio of the hypochlorite to the peroxide is in the range of about 10:I to 50:I.
30. (new) A biocide composition as in Claim 29, wherein the weight ratio of the hypochlorite to the peroxide is about 10:I.
31. (new) A biocide composition as in Claim 29, wherein the peroxide is an alkali metal peroxide.
32. (new) A biocide composition as in Claim 31, wherein the peroxide is sodium peroxide.
33. (new) A biocide composition as in Claim 29, wherein the peroxide is hydrogen peroxide.
34. (new) A biocide composition as in Claim 29, wherein the hypochlorite is an alkali metal hypochlorite.
35. (new) A biocide composition as in Claim 34, wherein the hypochlorite is sodium hypochlorite.
36. (new) A biocide composition as in Claim 29, wherein the peroxide is hydrogen peroxide and the hypochlorite is sodium hypochlorite.

The following is an examiner's statement of reasons for allowance: Applicant provides unexpected results for the addition of peroxide to hypochlorite in a 10:1 to 100:1 ratio range. See paragraph 39 and Table 6.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

#### ***Telephonic Inquiry***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alton N. Pryor whose telephone number is 571-272-0621. The examiner can normally be reached on 8:00 a.m. - 4:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Kunz can be reached on 571-272-0887. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Alton Pryor  
Primary Examiner  
AU 1616